Volume 54 1975

Table of Contents

1 Blocks in Elongation and Initiation of Protein Synthesis Induced by Interferon Treatment in Mouse L Cells
J. Content, B. Lebleu, U. Nudel, A. Zilberstein, H. Berissi, and M. Revel

11 Glycerol-3-Phosphate Shuttle and Its Function in Intermediary Metabolism of Hamster Brown-Adipose Tissue
J. Houštěk, B. Cannon, and O. Lindberg

19 The Lysozyme from *Asterias rubens*
J. Jollès and P. Jollès

25 Biotin Carboxyl Carrier Protein in Barley Chloroplast Membranes
C. G. Kannangara and C. J. Jensen

31 The Reactive Sites of Kunitz Bovine-Trypsin Inhibitor. Role of Lysine-15 in the Interaction with Chymotrypsin
J. Chauvet and R. Acher

39 ^{31}P Nuclear-Magnetic-Resonance Studies of Pyridoxal and Pyridoxamine Phosphates. Interaction with Cytoplasmic Aspartate Transaminase
M. Martinez-Carrion

45 Digestion with Matrix-Bound Proteases as a Possible Probe for the Topography of the DNA-Dependent RNA Polymerase from *Escherichia coli*
H. R. Lill and G. R. Hartmann

55 Metabolism of the Phosphatidylglycerol Molecular Species in *Escherichia coli*
M. Kito, M. Ishinaga, M. Nishihara, M. Kato, S. Sawada, and T. Hata

65 Kinetic Equivalence of the Active Sites of Alcohol Dehydrogenase from Horse Liver
M. Hadorn, V. A. John, F. K. Meier, and H. Dutler

75 Ribosomal Subunit Localization of Hemoglobin Messenger RNA
G. A. Howard and E. Herbert

81 Characterization of a Specific Transport System for Arginine in Isolated Yeast Vacuoles
T. Boller, M. Dürr, and A. Wiemken

93 No Correlation between Native and Denatured Forms of $tRNA^{Trp}$ from *Escherichia coli* and the Resistant and Sensitive Molecules Characterised by Phosphorolysis. Two Classes of Conformation Characterised by Phosphorolysis in Both Native and Denatured $tRNA^{Trp}$
M. N. Thang, R. H. Buckingham, and L. Dondon

97 Identification of Two Products of Mitochondrial Protein Synthesis Associated with Mitochondrial Adenosine Triphosphatase from *Neurospora crassa*
G. Jackl and W. Sebald

107 The Catecholase Activity of *Neurospora* Tyrosinase
S. Gutteridge and D. Robb

117 The Mitochondrial ATPase. Evidence for a Single Essential Tyrosine Residue
S. J. Ferguson, W. J. Lloyd, M. H. Lyons, and G. K. Radda

127 The Mitochondrial ATPase. Selective Modification of a Nitrogen Residue in the β Subunit
S. J. Ferguson, W. J. Lloyd, and G. K. Radda

135 Sequence of a Specifically Encapsidated RNA Fragment Originating from the Tobacco-Mosaic-Virus Coat-Protein Cistron
H. Guilley, G. Jonard, K. E. Richards, and L. Hirth

145 Observations Concerning the Sequence of Two Additional Specifically Encapsidated RNA Fragments Originating from the Tobacco-Mosaic-Virus Coat-Protein Cistron
H. Guilley, G. Jonard, K. E. Richards, and L. Hirth

155 Photoinactivation and Carbethoxylation of Leucine Aminopeptidase
M. Ludewig, M. Frohne, I. Marquardt, and H. Hanson

163 The "Hidden Ligand" of the Galactose-Binding Protein
T. J. Silhavy and W. Boos

169 The Effects of Spermine and Mg^{2+} on the Catalytic Mechanism of Isoleucine : tRNA Ligase
A. C. Carr, G. L. Igloi, G. R. Penzer, and J. A. Plumbridge

175 Two Enzymically Active Forms of Glycyl-tRNA Synthetase from *Bacillus brevis*. Purification and Properties
A. P. Surguchov and I. G. Surguchova

185 Iron-Sulfur Components of Succinate Dehydrogenase: Stoichiometry and Kinetic Behavior in Activated Preparations
H. Beinert, B. A. C. Ackrell, E. B. Kearney, and T. P. Singer

195 Composition, Quaternary Structure, and Catalytic Properties of D-Ribulose-1,5-Bisphosphate Carboxylase from *Euglena gracilis*
B. A. McFadden, J. M. Lord, A. Rowe, and S. Dilks

207 Molecular Organization in Bacterial Cell Membranes. Specific Labelling and Topological Distribution of Glycoproteins and Proteins in *Streptomyces albus* Membranes
V. Larraga and E. Muñoz

219 Proton-Magnetic-Resonance Studies of the Lysine Residues of Ribonuclease A
L. R. Brown and J. H. Bradbury

229 Purification and Characterization of a New Factor which Restores Protein Synthesis in a Conditionally Lethal Mutant of *Escherichia coli*
J. P. van der Meer and M. C. Ganoza

239 Studies on the *de novo* Biosynthesis of NAD in *Escherichia coli*. The Separation of the *nadB* Gene Product from the *nadA* Gene Product and Its Purification
G. R. Griffith, J. LR Chandler, and R. K. Gholson

247 Substrate Stereochemistry of the Enoyl-CoA Hydratase Reaction
P. Willadsen and H. Eggerer

253 Substrate Stereochemistry of the Acetyl-CoA Acetyltransferase Reaction
P. Willadsen and H. Eggerer

259 Lysophospholipids in Pig Pancreatic Zymogen Granules in Relation to Exocytosis
W. J. Rutten, J. J. H. H. M. de Pont, S. L. Bonting, and F. J. M. Daemen

267 Interactions of Heteroaromatic Compounds with Nucleic Acids. 1. The Influence of Heteroatoms and Polarizability on the Base Specificity of Intercalating Ligands
W. Müller and D. M. Crothers

279 Interactions of Heteroaromatic Compounds with Nucleic Acids. 2. Influence of Substituents on the Base and Sequence Specificity of Intercalating Ligands
W. Müller, H. Bünemann, and N. Dattagupta

293 Topology of Binding Sites for Carbamyl Phosphate in Aspartate Transcarbamylase from *Escherichia coli*. The Use of Pyridoxal Phosphate as Covalent Probe
P. Suter and J. P. Rosenbusch

301 Surface Carbohydrate Composition of Different Types of Chicken Lymphocytes
W. Droege, J. L. Strominger, P. P. Singh, and O. Lüderitz

307 The Isolation of Nuclei and Basic Nucleoproteins from the Cellular Slime Mold *Dictyostelium discoideum*
M. C. Charlesworth and R. W. Parish

317 Biogenesis of Polysomes and Transport of Messenger RNA in Yeast
L. Brañes and A. O. Pogo

329 Translational Step Inhibited *in vivo* by Aflatoxin B_1 in Rat-Liver Polysomes
A. Sarasin and Y. Moulé

341 The Stimulation of Liver Phosphorylase *b* by AMP, Fluoride and Sulfate. A Technical Note on the Specific Determination of the *a* and *b* Forms of Liver Glycogen Phosphorylase
W. Stalmans and H.-G. Hers

351 Deficiency of Joining of Okazaki-Type Fragments in Absence of Cellular Protein Synthesis
D. Werner and G. Maier

359 Non-Helical Sequences of Rabbit Collagen. Correlation with Antigenic Determinants Detected by Rabbit Antibodies in Homologous Regions of Rat and Calf Collagen
U. Becker, P. P. Fietzek, H. Furthmayr, and R. Timpl

367 The Mitochondrial Genome of *Euglena gracilis*
G. Fonty, E. J. Crouse, E. Stutz, and G. Bernardi

373 Acetyl-Coenzyme-A Carboxylase in Cultured Hepatocytes. Effects of Exogenous Fatty Acids on the Content, Synthesis and Degradation of the Enzyme
K. Kitajima, S. Tashiro, and S. Numa

385 Interactions of Heteroaromatic Compounds with Nucleic Acids. A·T-Specific Non-Intercalating DNA Ligands
W. Müller and F. Gautier

395 Conformational Changes of Alamethicin Induced by Solvent and Temperature. A ^{13}C-NMR and Circular-Dichroism Study
G. Jung, N. Dubischar, and D. Leibfritz

411 Covalent Attachment of DNA to Agarose. Improved Synthesis and Use in Affinity Chromatography
D. J. Arndt-Jovin, T. M. Jovin, W. Bähr, A. M. Frischauf, and M. Marquardt

419 Reassociation Kinetics of Deoxyribonucleic Acid in Antigen-Stimulated Mouse-Spleen Cells
N. Moav, B. Moav, and A. Frensdorff

427 Interaction of a Non-Histone Chromatin Protein (High-Mobility Group Protein 2) with DNA
G. H. Goodwin, K. V. Shooter, and E. W. Johns

435 Sterol Biosynthesis in Yeast. 3-Hydroxy-3-methylglutaryl-Coenzyme A Reductase as a Regulatory Enzyme
M. Boll, M. Löwel, J. Still, and J. Berndt

445 Properties of a Cytoplasmic Proteolytic Enzyme from *Escherichia coli*
P. Régnier and M.-N. Thang

453 Spin-Labeling Studies of Urea-Treated Leucine Aminopeptidase
G. Lassmann, W. Damerau, G. Sklenar, D. Schwarz, M. Frohne, M. Ludewig, and H. Hanson

459 Mechanism of 2-Deoxy-D-glucose Inhibition of Cell-Wall Polysaccharide and Glycoprotein Biosyntheses in *Saccharomyces cerevisiae*
Z. Krátký, P. Biely, and Š. Bauer

469 Modification of Amino Groups of Human-Erythrocyte Glycoproteins and the New Concept on the Structural Basis of M and N Blood-Group Specificity
E. Lisowska and M. Duk

475 Synthesis of Coenzymically Active Soluble and Insoluble Macromolecularized NAD^+ Derivatives
P. Zappelli, A. Rossodivita, and L. Re

483 Quantitative Binding of Antibiotics to Ribosomes from a Yeast Mutant Altered on the Peptidyl-Transferase Center
A. Jimenez and D. Vazquez

493 Spectroscopic Evidence for the Formation of a 4-Keto Intermediate in the UDP-Apiose/UDP-Xylose Synthase Reaction
C. Gebb, D. Baron, and H. Grisebach

499 Effects of Ricin on the Ribosomal Sites Involved in the Interaction of the Elongation Factors
L. Carrasco, C. Fernandez-Puentes, and D. Vazquez

505 *Trans-N*-Deoxyribosylase: Purification by Affinity Chromatography and Characterization
J. Holguin and R. Cardinaud

515 *Trans-N*-Deoxyribosylase: Substrate Specificity Studies. Purine Bases as Acceptors
J. Holguin, R. Cardinaud, and C. A. Salemink

521 12-(9-Anthroyl)stearic Acid, a Fluorescent Probe for the Ubiquinone Region of the Mitochondrial Membrane
B. Chance, M. Erecinska, and G. K. Radda

531 The Biosynthesis of Basement-Membrane Collagen by Isolated Rat Glomeruli
M. E. Grant, R. Harwood, and I. F. Williams

541 On the Interaction of Esters and Peptides with Carboxypeptidase B
N. Zisapel and M. Sokolovsky

549 Flavocytochrome b_2: Kinetic Studies by Absorbance and Electron-Paramagnetic-Resonance Spectroscopy of Electron Distribution among Prosthetic Groups
C. Capeillère-Blandin, R. C. Bray, M. Iwatsubo, and F. Labeyrie

567 Lipophilic Proteins Encoded by Mitochondrial and Nuclear Genes in *Neurospora crassa*
H. Küntzel, N. J. Pieniążek, D. Pieniążek, and D. E. Leister

577 The Amino-Acid Sequence of Leghemoglobin Component *a* from *Phaseolus vulgaris* (Kidney Bean)
P. Lehtovaara and N. Ellfolk

585 Biogenesis of Mitochondrial Membranes in *Neurospora crassa*. Mitochondrial Protein Synthesis during Conidial Germination
E. S. Hawley and J. W. Greenawalt

603 Electrodialysis of Lipopolysaccharides and Their Conversion to Uniform Salt Forms
C. Galanos and O. Lüderitz

611 Purification of Rheumatoid Synovial Collagenase and Its Action on Soluble and Insoluble Collagen
D. E. Wooley, R. W. Gianville, M. J. Crossley, and J. M. Evanson

Indexed in Current Contents